Atty. Docket No. YOR920030200US1
(590.109)

REMARKS

Applicants and the undersigned are most grateful for the time and effort accorded the instant application by the Examiner. Claims 1-9 were pending in the instant application at the time of the outstanding Office Action. Of these claims, Claims 1, 4, and 7 are independent claims; the remaining claims are dependent claims. The Office is respectfully requested to reconsider the rejections presented in the outstanding Office Action in light of the following remarks.

Rejection of claims 1-9 under 35 U.S.C. § 101:

The only issue presented in the outstanding Office Action is that Claims 1-9 stand rejected as being directed to non-statutory subject matter under 35 U.S.C. § 101.

Specifically the Examiner states the following:

> Claims 1-9 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

> The claims are directed to a method, process or system for calculating the reciprocal square root of a number via a mathematical algorithm. The claims are not limited to a practical application of the mathematical algorithm because the reciprocal square root result is not a useful, concrete and tangible result. More specifically the result is not a tangible result because it is not a real-world result.

> Relative to applicants' remarks, third paragraph on page 6, the referenced "rounding", "compute", "multiplying" and "adding" are all operations that are involved in computing the reciprocal square root of a number. Also while the result may be useful it is not tangible because it is not a real-world result i.e. contrary to State Street which involved computing data relating to share prices the mere

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> computation of the reciprocal square root of a number is
> not a practical application.
>
> The claims are also direct[ed] to a program per se. While
> the program contains functionally descriptive material the
> recording of the functionally descriptive material on some
> computer-readable medium, which would enable the
> functionality to be realized, fails to be recited.

With regards to statutory subject matter under Section 101, Applicants

respectfully submit that in order to qualify as statutory subject matter a claimed invention

need only accomplish a practical application by producing a useful, tangible, and concrete

result. MPEP § 2106(II)(A).

Applicants respectfully traverse the rejection of the claims under Section 101, but

have amended the independent claims to further emphasis they are directed to statutory

subject matter. Independent claims 1, 4, and 7 have been amended to recite, *inter alia*,

the following limitations: "wherein said reciprocal square root is **stored on a memory of**

at least one general-purpose computer."

Support for these amendments can be found in the Specification at page 12 lines

10-13. The Specification states that the claimed operation/arrangement may be

implemented on a general-purpose computer. It is well known to those of ordinary skill

in the art that general-purpose computers contain memory that stores the results of all

computer-based operations at least temporarily. Applicants respectfully submit that the

amendments to claims 1, 4 and 7 do not constitute new subject matter.

Applicants respectfully submit that the current invention, as claimed, amounts to

more than just an algorithm or the manipulation of abstract ideas. This is so because

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while utilizing algorithms the claimed invention produces results that are useful, concrete and tangible because they are stored on a computer memory. That the current invention operates via the input of data or information and results in the output of data or information is of no moment.

The Federal Circuit has repeatedly held that processes and systems engaged in the manipulation of data are eligible for patent protection. MPEP 2106(II)(A); *See e.g.,* State Street Bank & Trust Co. v. Signature Financial Group Inc., 149 F.3d 1368 (Fed. Cir. 1994) (holding that transformation of data relating to dollar amounts into data relating to share prices was patentable subject matter).

The crux of the issue of eligibility under Section 101 is not that data is manipulated through the operation of a machine or computer software or even that such manipulation could be conducted mentally. The real issue is whether the claimed invention produces a useful, concrete, and tangible result that is of practical application (i.e., has a certain level of 'real world' value). MPEP 2106(II)(A). For the reasons set forth above Applicants respectfully submit that the current invention, as claimed, meets the requirements for eligible subject matter under Section 101. Rejection of claims 1-9, as amended, on such grounds would therefore be improper.

For the foregoing reasons, Applicants respectfully submit that claims 1-9 are directed towards statutory subject matter. Applicants respectfully request that the Examiner withdraw the rejection of claims 1-9 under 35 U.S.C. § 101.
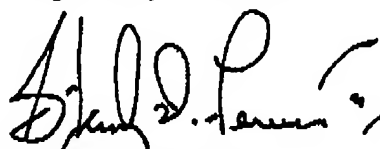
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Request for Telephone Interview:

The above Remarks notwithstanding the Applicants recognize and understand the focus of the Patent Office on ensuring that claims meet the statutory requirements of Section 101. To that end, should the Examiner, upon re-evaluation of the current rejection in light of the foregoing Amendments and Remarks, deem that a rejection under 35 U.S.C. § 101 is still proper; Applicants and their undersigned representative kindly request the courtesy of a Telephone Interview so that an agreement may be reached as to how the claims might be amended in order to satisfy Section 101 before the issuance of an Advisory Action.

In summary, it is respectfully submitted that the instant application, including Claims 1-9, is presently in condition for allowance. Notice to the effect is hereby earnestly solicited. If there are any further issues in this application, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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